

DETAILED ACTION

This Office action is responsive to the petitions filed 9/18/07 and 4/16/08 (in addition to the 12/10/07 response).

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file. Thus, Korean foreign priority is acknowledged.

This office action replaces the office action mailed on 4/2/2008.

Response to Argument

2. Applicant's arguments filed December 10, 2007 have been fully considered but they are not persuasive. Applicant argued that

The present invention teaches a specifically recited method of optimizing the configuration of a CBT-based overlay multicast, and a program storage device tangibly embodying a program of instructions for performing a method including calculating directions between various nodes and comparing the calculated directions to optimally select the various nodes.

In rejecting claims 1-2 and 7-8, the Examiner has cited specific portions of Madruga. Unfortunately, the cited portions of Madruga do not correspond to the rejected claims.

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For example, the term "child" was only used once in Madruga in discussing a prior art method be compared with the method of Madruga. The terms "terminal node", "parent node", "brother node" and "child node" were not used at all in Madruga.

Since a cited reference must teach each and every recited feature of a claim rejected under 35 USC 102, and since Madruga does not teach or even discuss each and every recited .feature of claims 1-2 and 7-8, it is submitted that these claims are patentable over Madruga.

Response: Examiner respectfully disagrees: With respect to the first argument Madruga teaches this argued subject matter (see column 3 line 5 and column 20 lines 59-65).

With regard to second argument, the terms child and parent have been taught by Madruga (see column 17 line 59 and column 19 lines 49- 50 "every time a router loses its parent").

Further, with regard to second argument the terms brother node and terminal node and parent have been taught by Madruga (see column 10 line 50 -examiner considers neighbor nodes that have same parent as brother nodes.) Finallyl examiner considers relay nodes as terminal the term terminal node (see column 6 lines 2, column 8 lines 23, 38, column 10 lines 41, and 56-58).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 and 7-8 are rejected under 35 U.S.C § 102 (b) as being anticipated by **Madruga et al. (US 6,917,985 B2)**.

For claims 1 and 7 Madruga teaches a method/program storage device of configuring a direction-based Core Based Tree (CBT) for a CBT-based overlay multicast (see Fig.1, column 2 lines 50-52 and column 20 line 51), the method comprising: requesting and receiving information on child nodes pre-subscribed to a core node at an arbitrary terminal node to be subscribed to the CBT (see abstract “ a join request” and Fig. 3 Procedure Handle Join” Fig 4.”Join request”); calculating a direction between the terminal node and each of the child nodes and transmitting information on the child node having a minimum resultant value (see column 10 lines 30-42) to the core node along with a subscription request message; and comparing the calculated direction between a corresponding child node and the terminal node with the calculated direction between child nodes pre-subscribed to the core node at

the core node and subscribing the terminal node to either the child node or a parent node of the corresponding child node in accordance with the comparison to configure the CBT(see column 10 lines 30-42 "shortest path").

For claims 2 and 8 Madruga teaches the method, further comprising periodically transmitting and receiving a hello packet at the core node and the terminal node to and from the parent node, the child node and a brother node to confirm a state of the corresponding node and reconfiguring the configured CBT in response to the confirmed state of the corresponding node (see column 7 lines 26-41 "heartbeat").

Allowable subject Matter

4. **Claims 3-6 and 9-12** are objected to as being dependent upon a rejected base claim, but would be allowable if written in dependent form including all of the limitations of the base claim any intervening claims.

Conclusion

5. Prior art made of record and not relied upon is considered pertinent to applicant's disclosure. **Francis et al. (5,331,637), Mccanne et al. (US 2004/0139150 A1), and Mccanne (US 7,080,157 B2).**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID OVEISSI whose telephone number is (571)270-

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3127. The examiner can normally be reached on Monday to Friday 8:00 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Huy D. Vu/
Supervisory Patent Examiner, Art Unit 2616